Performance Measurement

-A study of financial and non-financial measures in two logistics oriented companies.

Bachelor thesis within Business Administration

Authors: Joakim Johansson
         David Luotonen
         Markus Hasselström

Tutor: Jan-Olof Müller

Jönköping May 2008
Abstract

The purpose of this Bachelor Thesis is to study performance measurement within two logistics companies and how they balance financial and non-financial performance measures.

The study takes a qualitative approach to find out how, and also why the two selected logistics companies handle performance measurement the way they do. Current discussions on the topic of performance measurement involve whether smaller companies can benefit from measuring non-financial aspects of its business and develop measurement systems such as the Balance Scorecard, or whether this is a waste of a small companies’ scarce resources and is something that can best be utilized by larger companies with more resources. Some authors argue concerning performance measurements that size influence the firm’s controlling systems, as larger firms tend to rely more on formal administrative control while small and medium sized companies could therefore be seen as having a more informal administrative control. According to the initial survey done in this study company size seemed to be related to the extent which companies were involved in performance measurement.

The two logistics companies participating in the main study are Hemglass and Kronans Droghandel. KD work deliberately with performance measurements based on long-term thinking in connection to their strategy while Hemglass doesn’t work with these issues to the same extent. In accordance to our findings in this study Kaplan & Norton (1996) state that the major expected benefits and reasons for using both financial and non-financial measures materialize when the relationships between the two are understood. These relationships can be hard to establish, some links are more obvious than others, but if this can be managed the performance measurement efforts will be more fruitful.
# 1 Introduction

1.1 Background ................................................................. 1
1.2 Research question/Problem statement .................................. 2
1.3 Purpose .............................................................................. 2
1.4 Delimitations ..................................................................... 2

# 2 Method

2.1 Study design ...................................................................... 3
2.2 Disposition ........................................................................ 3
2.3 Sample selection ............................................................... 3
2.4 A qualitative approach ....................................................... 4
2.5 Generalizability ................................................................. 4
2.6 Data collection ..................................................................... 4
2.7 Interview technique .......................................................... 5
2.8 Data analysis ....................................................................... 5
2.9 Validity and reliability ....................................................... 6
2.9.1 Validity ............................................................................. 6
2.9.2 Reliability .............................................................. 6
2.10 Source criticism ............................................................... 7

# 3 Frame of reference

3.1 Financial and non-financial measurements .................................. 8
3.2 Control and measurement in organizations ................................ 8
3.3 History of control and performance measurement ...................... 10
3.4 Critique of traditional performance measurement ...................... 11
3.5 Control and measurement related to strategy .............................. 12
3.6 The choice of what to control and how to measure ....................... 12
3.7 Dilemmas with performance measurement ................................ 13
3.8 Ethical aspects of performance measurement .............................. 14
3.9 Balanced Scorecard .......................................................... 14
3.9.1 Financial Perspective ....................................................... 15
3.9.2 Customer Perspective ...................................................... 16
3.9.3 Internal Business Processes Perspective .............................. 16
3.9.4 Learning and Growth Perspective ...................................... 16
3.10 BSC performance measurement in small organizations ............ 16

# 4 Empirical findings

4.1 The background of Hemglass .............................................. 18
4.1.1 An idea turned into reality ............................................... 18
4.1.2 From 2 to 200 millions in 10 years ................................... 18
4.1.3 The Swedish branch of Hemglass ................................ 18
4.1.4 International establishment ........................................... 19
4.2 Interviews performed at Hemglass AB ................................ 19
4.2.1 Performance measurement ............................................. 19
4.2.2 Important measures ..................................................... 19
4.2.3 Measurement methods .................................................. 20
4.2.4 Non financial measures ............................................... 20
4.2.5 Current goals and strategies .......................................... 20
4.2.6 Changes in performance measurements and goals ................ 21
4.2.7 Gathering measures ..................................................... 21
5 Analysis ................................................................................................................. 28
  5.1 Hemglass AB ...................................................................................................... 28
  5.1.1 Strategy and measurements .......................................................................... 28
  5.1.2 Priorities in performance measurement ....................................................... 28
  5.1.3 Balanced scorecard ....................................................................................... 29
  5.2 Kronans Droghandel AB .................................................................................... 29
  5.2.1 Strategy and Measurements .......................................................................... 29
  5.2.2 Priorities in performance measurement ....................................................... 30
  5.2.3 Balanced scorecard ....................................................................................... 31
  5.3 Kronans Droghandel and Hemglass AB comparison ......................................... 31

6 Conclusion ........................................................................................................... 33

7 Discussion ............................................................................................................. 35
  7.1 Suggestions for further study ............................................................................ 36

8 References ............................................................................................................. 37

9 Appendix .............................................................................................................. 40
  Appendix 1 - Questions for Small and medium sized companies ....................... 41
  Appendix 2 - Questions for detailed interviews ..................................................... 42
1 Introduction

This chapter of the paper will provide a background and raise questions within the chosen research field. The purpose, goals and delimitations of the paper will be presented, as well as why this subject is interesting to study.

1.1 Background

In the last decade there has been an increase in published research concerning the balance between financial and non financial performance measurements (Chapman 2005, Kaplan and Norton 2001, Collier 2006, Merchant & Stede 2007). Chapman (2005) continues to argue that financial performance measurements within firms usually focus on short sighted solutions. The logic opposite would be that non financial performance measurements can be seen as more strategically long term. Traditionally, financial performance measurements have been dominating the organizations but literature and research in fields such as accounting and management control argues that non financial performance measurements should influence the decision making and managers to a higher extent (Chapman 2005, Kaplan and Norton 2001, Collier 2006, Merchant & Stede 2007).

Several models for balancing financial and non financial performance measurements have been developed and one of the most well known is the so called Balanced Scorecard, developed by Robert Kaplan and David Norton. The model introduces a mix of financial and non financial performance measurements in order to get a more correct picture of the situation when performing management control. The model also focuses on the strategy as the central issue when developing control systems and performance measurements. Even though it have been argued that models such as the Balanced Scorecard have their advantages, companies that have attempted implementing it have frequently failed to fully achieve all predicted benefits. Reasons to this could be that the implementation of performance measurement models is generally time consuming, which puts pressure on the company (Olve et al 2004). This report aims to explore the usage of balancing financial and non financial measurements, in particular as a mean to achieve long term thinking, and what problems, benefits and opinions there are on the topic.

To put performance measurements in a practical context two logistics companies have been selected to be studied. Logistics companies have in recent years experienced hard constraints when manufacturing companies have realized that manufacturing costs are being reduced as much as practically possible, and that efficient supply chains are the next natural step. Further, issues like environmental concern, agility and lean thinking also put pressure on logistics oriented companies to increase efficiency (Smichi-Levi et. al. 2003).

The companies logistical aspects (transportation, distribution, JIT etc), today have a decisive role when it comes to their competitive advantages compared to other companies. These aspects are important because the need of giving the costumer fast and reliable deliveries and is maybe one of the most important competitive advantages today (Harrison and Von Hoek 2005).

Logistics oriented companies can therefore be seen as companies which increasingly need to control their expenses and operations and performance measurements can help doing that (Collier 2006, Merchant & Stede 2007). The two companies that are studied fit well in the project because they are both delivering manufactured products as a part of the whole sup-
ply chain. The companies were also chosen on the account of that the students already had contacts within the companies which simplified the access.

1.2 Research question/Problem statement

According to literature there are indications that non-financial control and performance measurement variables as found in tools and methods such as the Balanced Scorecard make companies focus more on long term strategies. On the contrary, financial measurement variables tend to direct focus towards short term profits (Chapman, 2005; Gomes et al. 2005; Olve et al 2004; Petri and Olve, 2003). The following research questions have been posed:

- What are the major expected benefits of using both financial and non-financial performance measurements?
- Do the two selected companies connect their performance measurement to the strategy?
- Why do the companies focus on the measures they do, and do they balance financial measurements with non financial measurements in their control system?

These are all rather open research questions, and we therefore take a more exploratory approach to these problems in our study. The purpose of taking an exploratory approach is to gain deeper knowledge about what the problem really consists of, and in this way reaching new understanding of the phenomenon (Jacobsen, 2002). Our questions involve both "how", "what" and "why" which means that they are both descriptive and explaining in their nature.

1.3 Purpose

The purpose of this thesis is to study performance measurement within two Swedish logistics companies and how they balance financial and non-financial measurements.

1.4 Delimitations

Two logistics oriented companies participated in the research. The aim of the study was to focus on performance measures of the type that influences company performance as a whole. Therefore, measures that affect a small and/or independent process are not necessarily considered in detail.
2 Method

2.1 Study design
This study has an intensive design, which means that we are focusing on fewer subjects in order to understand more aspects of the problem itself and the context in which the problem exists (Jacobsen, 2002). This intensive design of the study has led us to obtain relevant data for this particular context, which in turn is the reason why generalizing conclusions about the same problem in other contexts cannot be made based on our results.

2.2 Disposition
The thesis starts with an introduction to the theoretical background of performance measurement and the potential benefits of balanced performance measurement in the frame of reference section. By completing the frame of reference first a foundation to build on is created and that was necessary in order to perform a proper, useful and relevant data collection. Our findings are presented in the Results section and subsequently we present our conclusions. At the end of the thesis there is a discussion where we highlight certain issues of our work and also give suggestions for further study.

2.3 Sample selection
Since this is a qualitative study there is no reason to make a random selection of subjects to study (Svenning, 2003), and the study subjects have been chosen selectively based on the following criteria. Firstly, the study is focused on two companies with which the authors have personal connections to and an important reason for this choice was to achieve a good communication with our subjects. To address beliefs that these personal relations with the interviewed subjects have had negative implications on the objectivity of the study, it should be said that the connections the authors have with the interviewed subjects have been of the professional kind, i.e. worked in the same company. To exaggerate, understate or in other ways purposely distort information serves no higher purpose for either party in this study. These connections “opened doors” and offered the opportunity to interview people within the companies which work closely with performance measurement on a daily basis and that is a major reason for utilizing these contacts. Another fact that helps reduce the possible issues regarding objectivity is the fact that none of the authors no longer work for the organizations participating in the study. Overall, the authors would like to believe that these personal connections instead affected the study positively in the way that the interviewees found them selves comfortable and more willing to openly share their information with us.

Another reason for the choice of these two particular logistics companies is that all three of the authors also have a background in logistics and are therefore familiar in dealing with and understanding the nature and processes of such companies. Choosing logistics companies were deliberately made to utilize the comparative advantage the authors have in this field. This meant that the authors had to spend very little time understanding the exact meaning of different measures which can be found in logistics oriented companies and instead being able to focus on fulfilling the purpose of the study.

A third reason for selecting these two logistics companies for the study is, as mentioned in the introduction, the current situation on the logistics market. The demand from manufac-
turing companies for increased supply chain efficiency (Smichi-Levi et. al. 2003) and the ongoing globalization of markets makes logistics an ever current topic to study.

2.4 A qualitative approach

Historically, quantitative research has been viewed as the only option if one wishes to obtain credibility. This is due to the historical definition of science being experiments conducted and results measured and gathered. Still today, not every scientist fully respects qualitative research (Carr, 1994). There appears to exist one strength in qualitative research for every weakness in quantitative, and vice versa. Thus, no best method overall can be determined, but the decision of what kind of method to use must be made in every single case. If enough resources are available, the methods are ideally used in combination (Carr, 1994).

We have taken a qualitative approach. With the two selected companies that agreed to take part in the study a qualitative study using in-depth interviews was conducted to find out how, and also why the two logistics companies in the study handle performance measurement the way they do. The reason for this approach is that we aim to gain deeper knowledge of fewer samples in order to better understand the reality these companies operate in. When the goal is to find out “why”, and also give examples of “why” a “soft data” qualitative study is appropriate (Svenning, 2003).

Each company’s situation is likely to be different. Even though these companies are in the same line of business, i.e. logistics, they handle different products and operate in different markets. This causes them to handle performance measurement differently, and there are surely differences in how successful they are. Because of these differences a qualitative approach seems suitable in order to fulfill our purpose. Choosing a qualitative approach has also given us the opportunity to remain flexible during the course of the study (Jacobsen, 2002), enabling us to handle new aspects of our problem which we wanted to address. The flexibility of the study makes the data collection into an interactive process. This interaction with the interviewees can raise previously unconsidered issues related to the study which can then be followed up on. Data can also be analyzed bit by bit as it is obtained and the continued course of the study can be outlined based on the data at hand.

2.5 Generalizability

A possible weakness of choosing a qualitative approach is that we provide examples of how performance measurement is handled within these two logistics oriented companies in particular, but cannot make any generalizations about performance measurement in general. More or less generalizing conclusions can be drawn from examples depending on what methodological foundation the authors refer to (Svenning, 2003). The problem of generalization always has to be taken into account when taking a qualitative approach to a study (Jacobsen, 2002).

2.6 Data collection

With the input from studied literature combined with the purpose of our study the questionnaire for our two major interviews was constructed (Appendix 2).

Collected data can either be of the “soft” or “hard” kind. Soft data usually refers to words and hard data usually refers do numbers, but the two can be seen as extremes on a contin-
uum and used in combination (Svenning, 2003). Since we have chosen a qualitative approach the data collected is mainly of the soft kind consisting of in-depth interviews with our respondents, but the study also contain some numerical examples.

2.7 Interview technique

Conducting individual interviews is probably the most common method of collecting soft data in a qualitative study (Svenning, 2003), and it also seemed like the most logical choice in order to fulfill the purpose of the study in our case.

The interview procedure has great influence on the outcome of the study and there are a number of aspects to consider when conducting interviews to ensure the validity and reliability of the study (Jacobsen, 2002). Interviews can be more or less structured. A completely structured interview has questions with preset answer alternatives for the interviewee to chose from, this is one extreme on the structure scale. The other extreme is a completely unstructured interview without specific questions but rather around a theme where the interviewee can talk openly as he or she chooses. The ideal of the qualitative approach is to have a completely open and unstructured in-depth interview, but in order to obtain data which are possible to analyze a certain degree of structure has to be applied (Jacobsen, 2002). Our interviews were based around a set of open questions in order control the content and to limit the scope of the interviews. When constructing the questions unclear definitions such as “many”, “few”, “long”, “short” and so on have been purposely avoided, and this is because clear definitions in questions reduce the risk of misconceptions and increase reliability (Svenning, 2003).

Confidentiality was never an issue during the interviews and the two subjects cooperated and communicated openly. We sought interviewees rather high up in the company hierarchy that were involved in strategy decisions, in order for them to be able to provide us with in-depth answers regarding how the companies deal with performance measurement and we were granted interviews with people who worked directly with matters related to performance measurement on a daily basis. During the summer of 2007 two major interviews were done; One with Björn Södergren, Brand manager at Hemglass the other one with Per Kjörling, Head of healthcare logistics at KD. Both interviewees worked directly with performance measurement on a daily basis and that was the major contribution factor to the choice of these two interviewees. The interviews were performed in Swedish at the company location in order to create an as comfortable atmosphere for the interviewees as possible. In addition to these interviews email correspondence with the interviewees has taken place afterwards for information clarifications and gathering of additional information.

2.8 Data analysis

After the data collection a return to the theoretical framework was done to see if it needed to be complemented. The analysis of the empirical findings was then continued. In the analysis section the empirical findings in the result section are compared with related literature in the frame of reference section.

It is possible to perform data analysis by using computer software. However, the process of coding qualitative data for use in such applications is very time consuming. Thus, if the data set is not extremely large, a manual approach to analyze it should be the preferred alternative (Webb, C. 1999). Additionally, using automatic tools might reduce the artistic and creative incentives that are much needed when doing qualitative research. The intellec-
tual work of actually conceptualizing can only be done by the brains of the researchers, and therefore a completely manual approach has been taken for the data analysis in this study.

2.9 Validity and reliability

2.9.1 Validity

A general challenge when it comes to research is how to translate your problem statement or purpose into concrete measurement instruments, such as questionnaires or observation protocols. This connection is critical, to make sure you are measuring what you actually intend to measure. This is called validity (Svenning, 2003).

Completing the frame of reference before conducting the study was done with the intention to strengthen the validity of our results through proper understanding of the topic. This way questions became more relevant and answers also became more appropriate to fulfill the purpose. Also, since we conducted a qualitative study, the validity of the results is generally not as big of a problem as when conducting a quantitative study since it is easier to obtain validity when conducting qualitative studies since data collection is done through interviews (Svenning, 2003). This concerns foremost the internal validity, the external validity, or the so called generalizability, can be just as hard to ensure in both quantitative and qualitative studies (Svenning, 2003).

2.9.2 Reliability

Reliability refers to how reliable research results are. If nothing changes in a population or sample selection two studies with the same purpose should generate the same result in order for a study to be reliable (Svenning, 2003).

Since this study is qualitative and the data collection is conducted by performing interviews the data consist of a mix of facts, explanations and opinions by the interviewees. If a second study with the same purpose and conducted by the same persons is conducted the result will only be the same if the interviewees opinions remain the same. People are emotional by nature and it is possible that a person will provide slightly different answers when asked the same question twice (Svenning, 2003). However, the results in this study build upon the answers which were received and these answers will have to be regarded as reliable in their context. Since the interviewees deal directly with matters related to our study they are likely to give reliable answers to our questions and this can be argued to strengthen the reliability of the study. Björn Södergren have been working at Hemglass his entire career, starting at the lower levels of the organization and advancing up to his current position as Brand manager for the Jönköping region (Södergren, B., Personal communication. 2007-07-05). This experience leads to believe that Södergren has both a sufficient overview and an insight in daily operations throughout the different levels of the organization. Per Kjörling has 10 years of working experience at KD and one of the major responsibilities he has in his current position as Head of healthcare logistics is working with performance measurement (Kjörling, P., personal communication. 2007-07-13), thus indicating the reliability of both the interviewees’ answers.
There is a difference between facts, explanations and opinions, but in reality they are often woven together. It is therefore important to consider the context of information and by whom the information is provided (Svenning, 2003). In the frame of reference books by renowned authors related to our research have been studied and those sources of information have therefore been considered as legitimate. When it comes to the data collection, the information obtained is surely a mix of facts, explanations and opinions. However, that is not necessarily a problem in our case, since there is no need to separate them to solve the purpose of the study. The purpose is to study how the two companies study performance measurement and how financial and non-financial performance measures are balanced and our study provides two examples of this. These examples are made up of facts, explanations and opinions and that is really the only way they can be put together in this study.
3 Frame of reference

In this chapter control and measurement theory will be presented, together with the purpose of measurement and controlling the organization and which methods that exists. The aim is to describe the purpose of doing performance measurement and having control systems, how companies historically have solved these problems and how to use performance measurements and control system to achieve profit goals and strategies. The focus will be on financial contra non-financial measurements and the methods of balanced performance measurement.

3.1 Financial and non-financial measurements

The purpose of performance measurement and control systems is basically to communicate information which facilitates managerial decisions and actions. Performance is how well a company does, and a measure or measurement is a quantitative value that can be scaled and used for purpose of comparison (Simon 2000, 234). Performance measures can be divided into two types, financial and non-financial. Financial measurements are stated in monetary terms, such as revenue or profit for example. Non-financial are quantitative data not expressed in monetary terms such as productivity, quality failures and customer satisfaction (Simons 2000, Collier 2006). The financial measurements can be collected into financial statements such as balance sheets, income statements, and cash flow statements. An example of a financial measurement for an organization can be sales value, while a non-financial measurement can be markets shares (Simons 2000). The financial perspective of measuring in companies can also be explained as lagging, or historical measurements, which means that financial measurements show what has happened. Examples are revenue, profitability and asset utilization (Niven 2005). The opposite of lagging measures are leading measures and these contain indications on performance before the actual process has started while it is still in progress. Examples of these are employee training, process quality controls and work in process costs (Simons 2000).

The financial measures can be (1) revenue, or revenue growth – this measure indicates customer willingness to purchase a firm’s goods and services, (2) Gross Profit Margin – reflects the willingness of customers to pay premium prices in return for perceived value in the firm’s products or services, (3) Warranty expenses and/or product returns – these measures provide insight into product quality and the extent to which products meet customer expectations concerning features and attributes(Simons 2000, 172).

The non financial measures can be (1) Market share or market share growth – Market share is a measure of customer acceptance relative to competitive offerings in the marketplace, (2) Customer satisfaction – these measures reflect customer perception of value and the extent to which products or services have met customer expectations. These data are usually collected through survey techniques administered by telephone or mail after sales of goods and services, (3) Referrals – This measure of customer loyalty is calculated by gathering data on the source of new business and maintaining a score of new business generated by referrals (Simons 2000, 172).

3.2 Control and measurement in organizations

Something that is mentioned frequently in the theory around performance and control is goals, objectives and targets. Goals may represent general aspirations of the firm, such as; introducing a new product to the firm’s product portfolio; improve production efficiency
and becoming profitable. Objectives and targets are more specific, they consist of measurements and time frames and could be for example; receiving five new orders on a new product; reduce production waste by ten percent; earn fifteen percent return on sales in the next year. In reality this have thus little consistency, firms use goals, objectives and targets both in the way mentioned, but also in different ways with suggestive objectives as general terms (Simons 2000). Something that has to be consistent though is the use of measurements in making goals and objectives actionable. To measure the performance in the processes – performance measurements – and thereafter define, calibrate and communicate business goals while supporting them through performance measurements is an important managerial task (Simons 2000).

The term performance goal is defined as the desired level of accomplishment against which actual result can be measured. The reason of having these performance goals, can be many but Simons (2000, 233) argues that performance goals and measures (1) allow for systematic and clear communication of what the manager should focus on, (2) goals serve as a reference point for all key decisions, (3) goals provide managers with a motivational tool when linked to bonuses and promotions (4) performance goals can be shared with stockholders and analysts when appropriate, to communicate the prospects of the business (Simons 2000).

Control and measurement theory contain two different terminologies, and these two terminologies are closely related and do in reality mean similar things: Management control system and Performance measurement and control system (Simons 2000, Collier 2006).

The first terminology that will be presented is Management control system (MCS). This is presented by Chapman (2005) and it has a strategic nature and can also enable innovative strategic responses in an unstable environment. According to Chapman (2005) the MCS can be an effective method in establishing innovativeness throughout the organization. Recently, attention has been focused on how control systems for management can be used in developing the organization’s ability to tackle strategic uncertainties (Simons, 2000). The second terminology, performance measurement and control systems, deals with setting the directions of the company, making strategic decisions, and achieving desired goals. The purpose of this is to gather information with the focus on data which can be both financial and non-financial. This will influence both decision making as managerial actions and maintain or alter patterns in organizational activities (Simons 2000, Collier 2006). Setting direction towards desired goals is relatively easy for smaller businesses where all employees work together in one location, but when firms increase in size the techniques of controlling the situation become more complex (Simons, 3, 2000). Continuous changes in today’s business climate with the spread of multinational organizations and the complexity of doing business has also increased the demand for efficient controlling methods and tools in organization to achieve strategic objectives (Chapman 2005).

According to De Toni & Tonchia (2001), performance measurement systems found in the literature can be subdivided into 5 topologies:

1. Strictly hierarchical models which are characterized by cost and non-cost performances on different levels of aggregation, ultimately becoming financial/economic.

2. Balanced scorecard models, where several independent performances are considered. Perspectives such as financial, internal business processes, customers, learning, growth and so on are kept separate to a large extent, and are linked together only in a general way.
3. Models that can be called frustum models. They are characterized by abstract layers forming pyramid like structures, often with the company’s main vision at the top and pure financial variables at the base.

4. Models distinguishing between internal and external performances.

5. Value chain models, which also consider the internal relationships between supplier and customer.

Models classified using the topologies mentioned above can be classified in 3 additional different ways; vertical, balanced (or tableau), and horizontal (or by process). A certain topology describes models falling into one of the 3 previously mentioned classifications. For instance, a frustum model is both architecturally vertical and balanced, while a strictly hierarchical model is vertical. This relationship can be depicted in a table, freely derived from De Toni & Tonchia (2001):

<table>
<thead>
<tr>
<th>Vertical</th>
<th>Strictly hierarchical models</th>
<th>Frustum models</th>
<th>Balanced scorecard models</th>
<th>Internal-external performances models</th>
<th>Horizontal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Balanced</td>
<td></td>
<td></td>
<td>Balanced scorecard models</td>
<td>Internal-external performances models</td>
<td>Models related to value chain</td>
</tr>
<tr>
<td>Horizontal</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3.3 History of control and performance measurement

Traditionally, performance measurement models are of the so called frustum type. This means that they keep the cost aspects such as productivity and production costs separate from the innovative, non-cost measures such as quality, time and flexibility. The study conducted by (De Toni & Tonchia, 2001) in Italy showed that the most common models can be labelled frustum models, but the variations within that topology are large. Another finding was that taking so called human resources into consideration when doing performance measurements was a largely neglected aspect.

Before 1980, as good as all performance measurements in firms were only focused on cost accounting and budgeting (Gomes et al. 2005; Chapman 2005; Hope and Fraser 2003). Budgeting became a tool to manage the costs and cash flows in the 1920s, in large organizations like Dupont, General Motors, ICI and Siemens, but it was not until the 1960s this became customary to use as performance measurement. In the 1970s companies used costs, net income and return-on-investments, not only to keep score (performance measurements) but also to justify the actions of operating personnel at all levels (Johnson 1992).
This led to emphasizing selected financial indicators such as profit and return on investment. Critics have argued that measurements have been too focused on short-term profits. Partly due to this, new models have been developed taking other aspects into consideration. Also due to an increasingly competitive global marketplace with global firms entering local markets and a demand from costumers on high-quality products, fast delivery and cost efficiency companies have come to focus on cost reduction, flexibility, quality, and cycle time. The focus on measures has therefore shifted to meet the new demands, tools and methods have been developed, such as total quality management, value- added management and self managed work teams (Chapman 2005).

In the past control and performance measurement was according to Simon (2000) suffering from a number of defects, information was often too limited in scope, information was usually too general and aggregated, information was received too late and information was unreliable. The defects have however according to Simmons mostly been overcome by new and more efficient use of information technology as well as a better understanding of how to use performance measurements and control systems.

In response to all criticisms, quite a lot of different models for performance measurement have been developed. Some of the best recognized are the SMART (Cross and Lynch, 1989), the performance measurement matrix (Keegan et al., 1989), the balanced scorecard (Kaplan and Norton, 1992) and the integrated dynamic performance measurement system (Ghalayini et al., 1997).

3.4 Critique of traditional performance measurement

Still, criticisms have continued to surface about too much focus on financial measurements. Some of the criticisms appearing during the late 1980s (Gomes et al. 2005) and onward, include the following: (1) Encouraging local optimization, (2) Focus on the past, (3) Have been obstacles to implementation of just-in-time manufacturing, (4) Are not exact enough to be useful for productivity measurement and improvement programs, (5) Are lagging performance indicators, historical in nature, (6) Are the result of actions not the cause of them, (7) Do not measure and integrate all factors that are of importance for a firm’s success, (8) Are not externally focused, (9) Are not suitable in modern manufacturing settings, (10) Exclude some important factors which influence market share and profit, (11) Do not really guide firms in their strategic choices.

Petri and Olve (2003) also believe that financial measurements do not give the full picture of well an organization performs. They argue that the CEO should be rewarded more when the company shows negative outcome of profit and financial result, and less when results are positive. The statement is verified by that it is not the CEO’s task to determine the strategy, but merely work with the assignment given to them. Determining the strategy is the board of director’s task and responsibility, and they should be responsible if or not they make the right decisions. Moreover do Petri and Olve (2003) argue that the reasons for attaining good financial numbers can be as simple as a favourable business cycle or that the CEO is harvesting what the previous decision maker has sown. Further, there are cases where company management have stopped investments because it resulted in costs in the short run. A CEO can have done an excellent job, developing new products, increased internal process efficiencies and increased the company’s market shares. But the effect of these initiatives can take time to show up in the accounts, and even if they are positive in the long run they show up as costs first (Petri and Olve 2003).
3.5 Control and measurement related to strategy

Strategy has become the most important aspect to consider in organizational theory in many fields, economics, human resource management, information technology as well as management accounting and during the last decade there have been an increase in published research about the connection between control system and strategy (Chapman, 2005). In all businesses managers are interested in how to use goals to implement strategies and it is therefore important to understand that the control system is correlated to the strategy decisions that are undertaken in the organization (Chapman, 2005). Chapman (2005) argues that financial control -as accounting- within firms usually focus on short sighted solutions in contrast to strategically and long term solutions.

Companies have both business strategy as well as operational strategy and they are both affecting the control system. Within the operational strategies there exist quality strategies, product-related strategies and manufacturing flexibility and customer-focused strategies (Chapman 2005).

Performance measurement can be viewed as one of four main factors characterizing the current practice of strategic planning (Tapinos et al. 2005). The other factors are “organizational direction”, “organizational flexibility and uncertainty” and “strategic initiatives/options development and selection”. The impact of performance measurement on strategy seems to be largest for larger organizations and organizations operating in rapidly changing environments. In other words, performance measurement is more beneficial for such companies in general (Tapinos et al. 2005).

3.6 The choice of what to control and how to measure

Information on performance measurement and control is essential for an efficient organization, and a manager can use this information to communicate goals within the organization. This can later be used by the organization when assessing and controlling performance against those goals. One important question is: what information do we need to run the company (Chapman, 2005; Simons, 2000; Niven, 2005)? Further there are three different choices managers have when gathering information, and that is whether to put focus on inputs, the process itself, or the outputs. Managers must actually choose one of these to focus upon in order to achieve control and meet expectations on goods and services produced and delivered by the organization (Simons, 2000). Firstly does Simons (2000) state that information about the input is necessary but rarely sufficient for control. Managers therefore have to focus performance measurement and control on the process itself or the output to be certain that everything goes as it should. Simons (2000) also declare that output measures are lagging indicators while input and process measures are leading indicators. Making decisions on what to control and measure involves some issues for the manager, such as: the possibility to observe the processes or services in action accurately; does the manager understand the cause – outcome relationship of the process; the cost of measurement and control as well as the usefulness of measuring the process (Simons 2000).

There is also a risk of measuring the wrong variables, and as Simons (2000, 213) puts it; misaligned control systems in businesses can do more harm than good. Simons (2000) illustrates this with the example of driving a car and focusing too much on the speed limit and getting that right, instead of focusing on the direction and that the car might be headed north when it is supposed to be headed south. A company can not measure every little detail, but have to make choices about where they will spend their time and effort. As the old saying goes, what gets measured gets managed (Simons 2000).
To reach the performance goals set in the company, the performance measurements have to be determined and set. As mentioned before the performance measurements can be both financial as non-financial, and to determine if a measure is suitable for supporting the goal three tests can be performed (Simons 2000).

**Test 1: Does it align with strategy?**

Measures tell the employee what is important and every measurement tells a different story in terms of priorities, goals and business strategy. Measurements that are correct make the employee understand the business strategy in the company.

**Test 2: Can it be measured effectively?**

Measures should be objective, complete and responsive. With this means that measures should be independently measured and verified, it should capture all the relevant attributes of achievements and it should reflect actions that a manager can directly influence.

**Test 3: Is the measure linked to Value?**

To prove that a measurement is linked to value can be hard, take the example of employee training. If a business manager chooses to measure and improve employee training he or she may do that in the belief that customer satisfaction will increase, which will in turn lead to repeat sales and increased profit. However, this does not have to be true; the customer may be satisfied, but still choose to go to a competitor for other reasons. When measuring performance, linking measures to value can be done most easily with output measures (lagging indicators), while input and process measurements (leading indicators) should be used only if the manager understands the cause and effect relationships (Simon 2000).

Another important issue when designing the performance and control system in the company is who and where the performance will be measured. Some companies have according to Hope and Fraser (2003) abandoned financial performance measurements as in budgeting, not only for improving processes, but as a mean to decentralize their organization. By taking away budgeting as the defining process it perpetuates employee’s cultural norms and behavioural changes can be made. The key behavioural feature that is sought after is responsibility of performance by front line people. The task is thus to move the responsibility of strategic thinking and decision making from the centre to persons closer to the customer (Hope and Fraser 2003).

### 3.7 Dilemmas with performance measurement

When trying to adopt performance measurement systems, a company should not forget that these tools are just one of many ways of managing performance (Halachmi, 2005). Examples of other ways of managing performance include only measuring effectiveness and efficiency, management of important stakeholders or the organizational relations with them, management of organizational culture and motivation and so on.

Some of the criticism presented in the introduction section is still frequently mentioned today (Gomes et al. 2005). In fact, when considering all requirements of conducting accurate performance measurement it might be impossible to get good results all together (Halachmi, 2005). Moreover, the costs associated with implementing performance measurement might be higher than what the potential benefits are worth, if they even materialize at all.
Traditionally, performance measurement has focused on the financial, short term perspective. This has led to companies in the USA becoming less competitive than what could be expected (Halachmi, 2005). Still, introducing non-financial long term measures would not automatically have solved the problem. The softer measures have their own weaknesses, not only the potential difficulties of doing the measuring. One general weakness, typically applicable to softer measures, is the ethical aspect when humans are involved (Kerssen-van Drongelen & Fisscher, 2003).

Another criticism towards performance measurement is that by putting focus on measurement, the real causes for bad performance stay the way they are (Halachmi, 2005). A better way of using resources is to primarily focus on the achievement of goals, rather than detailed measurement. It is true that without any data at all, it can be hard to improve performance, but the collection of data or mere availability does not guarantee improvement either.

3.8 Ethical aspects of performance measurement

The procedures of measuring and evaluating human performance have led to both positive and negative effects being reported (Kerssen-van Drongelen & Fisscher, 2003). Ethical problems typically occur when people are supposed to measure and evaluate employees using soft parameters. According to (Kerssen-van Drongelen & Fisscher, 2003), performance measurement systems need to meet 3 basic demands in order to be functional:

- The performance measurement systems functions have to fit with the organizational structure and context at a certain time.

- The formats (metrics, norms, methods etc) have to be appropriate for the measurement function.

- Most importantly, the actors involved in performance measurement, have to function ethically.

It should, however, be noted that the three requirements are dependent on each other. For performance management system designers, this knowledge implies that the systems they design should not only take the technical aspects into consideration, but should also make systems that counsel and train managers in ethical responsibility.

Ethical conflicts typically occur when an individual responsible for performance measurement in some way experiences a clash between his/her role morality, self interest and/or common sense morality (Kerssen-van Drongelen & Fisscher, 2003).

3.9 Balanced Scorecard

Introduced in 1992 by Robert Kaplan and David Norton the Balanced Scorecard (BSC) was a new approach to strategic management. The BSC is a measurement and management system which helps organizations to translate their vision and strategy into action, and provide a comprehensible overview for managers of the organization’s performance. By providing feed-back on both internal business processes and the external outcomes of those processes strategic performance can be continuously improved. The BSC does not only focus on financial outcomes, but also on the human issues which generate those outcomes in order to ensure better performance in the long-term. The BSC system is intended to make man-
agers focus on the key performance metrics within a business that generate success (Arveson, 1998).

Kaplan and Norton (1996) describe the idea behind the balanced scorecard as follows (cited Arveson, 1998):

"The balanced scorecard retains traditional financial measures. But financial measures tell the story of past events, an adequate story for industrial age companies for which investments in long-term capabilities and customer relationships were not critical for success. These financial measures are inadequate, however, for guiding and evaluating the journey that information age companies must make to create future value through investment in customers, suppliers, employees, processes, technology, and innovation."

According to the Balanced Scorecard an organization should be looked at from four perspectives, which provide a framework for translating strategy into operations (see fig.1)

Fig. 1 - Source: balancedscorecard.org

3.9.1 Financial Perspective

An organization’s financial performance is crucial to its success and can be measured by e.g. number of debtors, cash flow and return on investment (ROI) etc. However, financial measures do not tell the whole truth. As mentioned earlier by Kaplan and Norton, financial figures are historical, they show what has happened, and may not show what is currently happening or what will be happening in the future. Neither can intangible assets be measured with financial measures (Kaplan & Norton, 1996).
3.9.2 Customer Perspective
This perspective include measures which are directly related to the organizations customers, such as customer satisfaction, customer retention and customer acquisition etc. These measures help managers formulate a customer and market strategy which will generate future financial returns (Kaplan & Norton, 1996).

3.9.3 Internal Business Processes Perspective
There are critical internal business processes in which an organization must perform well in order to be successful, and these must be identified. The internal business process measures should be focused on the internal processes which will have the greatest impact on customer and financial objectives. Further, the BSC approach can also help identify entirely new internal processes (e.g. innovation processes) in which the organization must excel to meet its objectives (Kaplan & Norton, 1996).

3.9.4 Learning and Growth Perspective
This perspective includes measures illustrating the organizations ability to learn and grow. An organization’s ability to learn and grow comes from three sources; people, systems and organizational procedures. The previous three perspectives (financial, customer and internal business processes) will reveal gaps between existing capabilities and required capabilities, and these gaps can then be closed by e.g. staff training or system restructuring (Kaplan & Norton, 1996).

3.10 BSC performance measurement in small organizations
Many organizations have realized the importance of constant and consistent measurement and have adopted a variety of performance measurement systems (Fernandes et al., 2006). The performance of firms seems to have a strong relationship with measurements done within them, especially concerning measurements of key processes. Recent research has shown that as little as 5% of the workforce in companies understand their company’s strategy, only 40% of the companies link their budgets to their strategies and only 15% of the executive teams spend one hour or more per month discussing strategy (Kaplan & Norton, 2001). This might be an explanation to why the balanced scorecard has gained popularity over the last few years (Fernandes et al. 2006).

According to Fernandes (2006) most studies in the area concludes that BSC adoption has gone far, but most fail to mention that the successfulness of adoption seem to correspond to company size. There are, however, researchers who claim that the balanced scorecard is as useful, perhaps even more useful, to smaller firms. In summery one can distinguish six aspects of the BSC which can help a small firm to perform better (Gumbus, A. & Lussier, R.N., 2006):

1) **Promotes growth.** The BSC is more concerned with long term goals than fast short term profits.

2) **Tracks performance.** Both individual and collective results can be tracked against targets in order to achieve improvements and corrections.

3) **Provides focus.** Measures can be aligned to the most important strategies and thereby provide focus to what is important for the company.
4) **Alignment to goals.** Measures become linked and support each other when one measures what is truly important for success to the organization.

5) **Goal clarity.** The question of “How does what I do daily contribute to the goals of the enterprise?” becomes much easier to answer with the support of a balanced scorecard.

6) **Accountability.** Individuals can be assigned as owners for specific metrics in the BSC. By doing so, the company obtains means to provide clear accountability for results.

As these aspects are just as important in small and medium sized organizations as in large ones, the BSC should arguably be of great use in all companies. Further is BSC a tool for long term goals according to (Kaplan & Norton, 1996; Arveson, 1998; Gumbus, A. & Lussier, R.N., 2006) and companies should develop its objectives, measures, targets in all perspectives in the BSC. Objectives are what companies want to achieve, and measures tell them how they do. Targets can be seen as measurable outcomes within every objective, while measures and objectives create focus for the future, not a simple measure of the past (Gumbus, A. & Lussier, R.N., 2006).
4 Empirical findings

Both sections in this chapter will commence with a presentation of the company which have been studied and give some historical background to put our findings in a context. Subsequently the results are presented under each section. Further, some questions found in the detailed questionnaire were derived from the performance measurement classification system described in the 'Control and measurement of organizations' section in this paper. The main reason for this structure is to find out how the investigated companies perform performance measurement, and how they treat non-financial measures.

4.1 The background of Hemglass

It all started in 1968, when Eric Ericsson, owner of the small family business Kalmar Glassfabrik since 1962, was trying to solve the problem of handling the product - Ice cream, which is relatively sensitive to variations in temperature. An even and low storage temperature is required in order to uphold a good quality of the ice cream. Even small variations in temperature will cause ice crystals to form and get larger in the ice cream. This will alter the texture and make the ice cream less tasty. At that time households were getting increasingly better abilities to store cold products, and this opened up new markets. Before refrigerators were common property among most households, ice cream was a luxury product. Grocery stores started selling ice cream, but there were many links in the chain which had to function in order for the consumer to get a high quality product all the way to his/her own freezer. The storing and handling of the products in the stores and among the wholesalers were not as good at that time as they are today. Consumers also had problems getting the ice cream from stores to their homes without it melting and getting tainted on the way (Hemglass.se, 2007).

4.1.1 An idea turned into reality

The idea was: "We deliver the ice cream directly from our factory to the customer!", and in September of 1968 the first ice cream truck went on its first selling trip in Täby close to Stockholm. Since most Swedes had fridges at this time, it was natural that Sweden became the first country to get this service (Hemglass.se, 2007).

4.1.2 From 2 to 200 millions in 10 years

During the 70s, Eric Ericsson’s ice cream company went through an explosive expansion. The turnover went from approximately 2 to 200 millions in 10 years, and the success demanded heavy investments. In 1973 Hemglass established themselves in Strängnäs and during the following years they were gradually becoming a part of the developing business Hexagon. From 1992 to 1997 the investment company Industri Kapital owned Hemglass, but in 1997 the German company Schöller became the owner, and since 2002 Hemglass is a part of the global food company Nestlé (Hemglass.se, 2007).

4.1.3 The Swedish branch of Hemglass

Hemglass has distribution channels throughout the entire country, based in around 40 local branch offices. Around half of them are run by independent entrepreneurs and the other half are subsidiaries to Hemglass. In total the local branches have over 300 employees and 240 distribution vehicles that visit most of the country’s households on a regular basis. There are approximately 150.000 static selling places, which means that every evening the
vehicles stop at 15.000 spots in Sweden to sell ice cream. All ice cream trucks in the country look the same and provide the same products. The products are meant to be cheap, of high quality and satisfy a wide range of tastes (Hemglass.se, 2007).

4.1.4 International establishment
After the expansion in Sweden, Hemglass was ready to try other countries. In 1976 Hemglass started a branch in Denmark by the name of Hjem-Is, and by 1993 the Hemglass group had also established branches in Norway and Finland. Since the end of 2005 all ice cream production has been concentrated to one factory in Esbjerg on the Danish west coast. From the idea in Kalmar in 1968, and a selling round in Täby that gave 160 kronor, a business with subsidiaries and independent entrepreneurs has grown. Nowadays the sales in the four countries exceed SEK 1 billion (Hemglass.se, 2007).

4.2 Interviews performed at Hemglass AB
The main interview at Hemglass AB was done with Björn Södergren, Branch manager of the Jönköping Branch.

4.2.1 Performance measurement
Every local office handles its own accounts, and reports to an office on a higher level in the organization. Hemglass in Jönköping, for instance, reports to an office responsible for all of Sweden. The Swedish head quarters, in turn reports to the Nordic head quarters, that in turn reports to the owner of Hemglass; Nestlé. Every sales office has measures reported to the other offices, including sales volume, daily results, work up on the households, costs etc.

In the middle of the 90’s the “ice cream war started”, where new companies entered the market. The entering of new companies together with a change in the costumer behavior into a lesser demand for Hemglass’s services created a harder business market.

Performance measurement is not based on the balanced scorecard and the method is not familiar in the organization. Still, the importance of balanced measurements is mentioned and Hemglass is working with a broad variety of measurements, both financial and non financial.

Performance is measured at several levels in the organization. Sales to certain households are measured. Also clusters of households and larger regions are measured. The sales volume compared to income is measured. On a higher level, geographical areas are measured in terms of profitability, and the budget is an important tool based on the income and costs at Hemglass (Södergren, B., Personal communication. 2007-07-05).

4.2.2 Important measures
The daily results are essential to maintain profitability and customer relations, as bad results might indicate that the customers have not gotten into a good relationship with the company. The company often deals with the end customer directly and the impression and the relation the customer has to the company decides the future of the company. Turnover is another important measure, necessary if one wants to maintain a professional marketing division and have monthly campaigns to attract new customers.
Another important measure is the daily sales per unit, as it affects the profitability directly. However, one thing to keep in mind is that this variable must not be allowed to influence customer care, as that will damage long term relations and profitability in the long run.

Other measures include result per employee and day, daily result compared to previous years, number of places visited, number of customer visits, amount of customers and sales per customer.

On a higher level, result in relation to the budget (income and costs), turnover compared to previous years and work up of the total area in comparison to previous years are important. On the highest level, market shares on a national level in relation to total ice cream sales, incomes and costs are mentioned as important for Hemglass (Södergren, B., Personal communication. 2007-07-05).

### 4.2.3 Measurement methods

The day to day measurement such as result per employee and day, daily sales per unit, number of places visited, number of customer visits, amount of customers and sales per customer is done by the salesman by filling out statistic forms, which are later handed over to the office administration. The administration offices compile the numbers and deliver them to the head office of Sweden. Accounting is then done by the same administration, in a specially designed IT based system. It uses broadband and has a client-server structure with a central server storing all data.

Customer care is measured by using so called “mystery shoppers”. These are employees that disguise themselves as ordinary customers. Their main objectives are to monitor the sellers so that they follow the policies of Hemglass and to check if their behavior is efficient (Södergren, B., Personal communication. 2007-07-05).

### 4.2.4 Non financial measures

In the long run, the non financial measures, in particular the competence of the sellers, are essential for Hemglass. Also, the short term profits change a lot depending on the competence level of the individual salesmen. Competence enhancement is done by information and communication of the company’s policies in the office and introduction that takes place during a four day period in connection to hiring. Social competence and the ability to take own initiatives are important to create good results. Those two factors are both essential in order to survive and reach profitability in the long run. This is however not easy to measure and the only tool Hemglass have for this are the “mystery shoppers”.

On higher levels the focus is more often on financial measures such as turnover, income and costs. Still, the basics for survival in the long run is developing and sustaining customer relations and providing access to the products for the customers (Södergren, B., Personal communication. 2007-07-05).

### 4.2.5 Current goals and strategies

Hemglass is currently trying to strengthen its position by gaining market shares on a national level. Gaining strength in the long run is done by focusing on increasing the turnover. The basic strategy is to achieve development by improving the results of the salesmen and the relationships with the customers. The responsibility of creating this is in the hands
of the local offices, and therefore it is very important to work with long term training for the salesmen.

The connection between measures and goals lies in the need for measures to be able to see development. If performance measurement was not done, it would be much harder to see if an individual seller has to change his/her way of working or behavior. One example would be a seller getting stuck with regular customers and not attracting any new ones. This is a dilemma which would of course have a negative impact on company development.

The performance measurement is done to make it possible for everyone within the company to see their personal progress and the development of the organization (Södergren, B., Personal communication. 2007-07-05).

4.2.6 Changes in performance measurements and goals

Ten years ago, strategies were developed mainly at the highest level in the organization, in cooperation with the sales department’s manager. Subsequently, routs and timetables were given to the sellers. Now days that have been moved down and the responsibility for the routs and timetables are in the hands of the local offices. It is now the local offices responsibility to create and maintain profitability on routs and they control this by conducting performance measurement on the route and the salesmen.

Björn Södergren states; “No one really looked at costs ten years ago, just sales results. In essence, the company was so profitable, that no performance measurements were needed [for purpose of controlling costs]”. Today, ten years later, Hemglass has had to work hard to maintain profitability (Södergren, B., Personal communication. 2007-07-05).

4.2.7 Gathering measures

All employees have to collect and process information and results about their work. Sellers report to their local sales office. The local sales offices report to the national main office. The national offices report to the group’s Nordic main office. The Nordic office finally reports to the owner of the group; Nestlé (Södergren, B., Personal communication. 2007-07-05).

4.2.8 Benefits

Because of the business Hemglass is in, one of the most important aspects for the company is measuring its salesmen and the profitability of the sale zones. It is even said that “Hemglass is all about measuring” now days. Performance measurement gives the opportunity to compare efforts in the company and it is also way to find out if employees need support or simply have to switch tasks for something more suitable to them (Södergren, B., Personal communication. 2007-07-05).

4.3 The background of Kronans Droghandel

In 1718 the pharmacist Luth, owner of the pharmacy Strutsen in Gothenburg, got an assignment. The task was to embalm King Karl XII, who had fallen in Fredrikshald in Norway. Luth never got any payment in cash, but instead got the title "Royal Pharmacist" – a great reward at that time. In relation to this event, the pharmacy changed its name to “Aposteket Kronan” (the crown pharmacy) (kd.se, 2007).
In 1907 the pharmacist Gustaf Bernström, employed at Kronan, got control over the part of the company which had been importing and trading drugs and medicine for hundreds of years and Kronans Droghandel AB was formed (kd.se, 2007).

A significant year in the history of Kronans Droghandel AB was 1970 when the Swedish government took control of over the pharmacies. At the same time a new system based on one channel distribution was introduced in order to increase cost efficiency and reliability, as a result of constant competition among wholesalers. Nowadays Kronans Droghandel AB (KD) provides roughly half of the distribution to all pharmacies in Sweden (kd.se, 2007).

KD was until 2006 part of the Orion Group with the Finnish Orion Corporation as the parent company. Orion Corporation has now been split into two separate companies which made the Oriola-KD Corporation the new owner of KD. In 2005 KD alone had approximately 370 employees in Sweden and a turnover of nearly SEK 7 billion (KD, 2007).

4.3.1 The idea behind

KD has a range of products in the three categories medicine, vaccine and medical supplies. Their market share is getting close to 50%, but they are still unknown to most people in Sweden. The reason for this is that the logo is not present on any of the products they handle. KD does not manufacture any products, and they are not a wholesaler either. Instead, the idea is to focus on being a logistics company; an independent link between manufacturer and end customer. In brief the concept is to provide simple, fast, secure and cost efficient medical product distribution. The development is carried out in collaboration with the industry and the public health services (kd.se, 2007).

4.3.2 Vision and values

Company vision:

"KD will be the leading logistic partner in the health care market in terms of customer focus, cost efficiency, quality and profitability.” (KD, 2005)

To be successful in the long run KD believe that trust and respect are necessary ingredients. Ideals stated at KD are to accept differences, be open to new ideas, and reward those who deserve it. To achieve this KD has developed a framework named “KEPS” – Kvalitet (Quality), Engagemang (Commitment), Professionalism and Service (kd.se, 2007). KD strives to be known as an organization with highly motivated and responsible employees which should be able to work independently and in cooperation to form leading logistics company in the health care sector (kd.se, 2007).

4.4 Interviews performed at Kronans Droghandel (KD)

The following results were gathered at a deep interview performed with Per Kjörling at Kronans Droghandel along with additional email correspondence. Per is head of Healthcare Logistics at KD and works with issues concerning performance measurement on a daily basis (Kjörling, P., personal communication. 2007-07-13).

4.4.1 Performance measurement at KD

KD uses something they call “The Compass” which is basically based the same principles as the Balanced Scorecard model; they just have their own name for it. KD started using the
compass relatively early, back in 1987, and this was before balanced measuring was popular among Swedish companies (Kjörling, P., personal communication. 2007-07-13).

![Diagram of the KD Kompassen model]

Fig. 2 - KD-Kompassen (KD Hur mäter vi?, 2005).

KD measure how well they perform today on a number of key performance indicators within each perspective and then establish target levels for these measures and by making different strategic decisions they then try to keep their performance at those target levels. In this way the key performance measures connect the strategy with the operational level. The measures are measured on an operational level but they are born from a strategy regarding the goals that want to be achieved (Kjörling, P., personal communication. 2007-07-13).

The measures are grouped as illustrated in “The Compass” and at KD they prefer to divide measures in groups like this rather than divide them into a hierarchy of different levels of importance. KD has no outspoken hierarchy of measurements but measures are broken down into components when analyzed. For example; analyzing the inventory turnover rate can be followed up by checking the suppliers’ service level, lead time or throughput time towards KD etc., in that sense measures can be broken down into its components. As Per explains, breaking the measures down like this and doing a detailed analysis is important to see where different decisions and improvements cause effects and understand what effects they cause (Kjörling, P., personal communication. 2007-07-13).

Regarding how performance measurement is handled on different levels in the organization the company management can for example look at a few measures such as market share or total service level for the entire company, these can then be broken down showing the different departments and their individual performance (Kjörling, P., personal communication. 2007-07-13).

4.4.2 Important measures

Within each perspective of the compass KD states the following measures as significant for their business (KD Hur mäter vi?, 2007):

**Financial perspective:** Focus is put on traditional measurements, such as Return on Capital Employed (ROCE) and Earnings before Interest and Taxes (EBIT), but also cost per order line.
Market perspective: Focus is typically put on market share and service level (internal and external) but also on the satisfied customer index.

Operations perspective: Focus on order lines (picked) per hour, supplier precision and quality level.

Competence perspective: Focus is mainly put on how much time is spent on educating staff, number of suggested improvements carried out and number of services developed towards customers. Also, sick-leave frequency is measured and a survey on employee satisfaction index is conducted every year just like the customer satisfaction index survey.

4.4.3 Measurement methods

The mother load of performance measurement data is collected through the company business system (IFS) where all transactions within the company are registered in time. Using statistics software this data is then compiled into reports and the results can be visualized as e.g. pivot charts for further analysis. However, all performance measurement data can not be collected through the business system and these data are collected through surveys. Customer satisfaction is one example. Each year KD conduct a customer satisfaction survey that is based on a variety of questions which generate answers on a scale from 1-5 on different aspects of the satisfaction customers feel with the services KD provide (Kjörling, P., personal communication. 2007-07-13).

When it comes to methods of visualizing performance measurement data for everyday application in the workplace KD have used what they call a “stop light” chart. The stop light chart is basically a sheet showing levels for a few selected measures, current values and mean values for the past weeks, and the levels of these measures are indicated on the sheet by different colours in a corresponding stop light figure. This method was applied as an attempt to “take the pulse” on the organization and get early indications on in which direction things were headed. Many measures show results of history, of things which have already happened, which means that nothing can be done about those specific values in time. When looking at service level for example, it shows the history of how well the company has been able to deliver to its customers. To improve the service level attention needs to be focused on the current availability of stock. Doing so means looking a bit ahead in time and it creates the opportunity to take action and make sure that goods can be delivered in full on time. The stop light sheet is posted once every day and if, for example, the “availability light” light turns from green to yellow it means that that particular measure needs to be paid some attention (Kjörling, P., personal communication. 2007-07-13).

4.4.4 Non financial measures

Regarding the service level KD measure the service degree on row-level and on package-level, which gives two different levels of measurement. Further they also measure internal and external service level, this is most important for the pharmaceutical goods and it is important for KD to see how large their own actual performance is. The internal service level concerns how well they manage to distribute goods from their central warehouse to their different units for distribution to end customers. They like to see their service level constantly at 100% but it is not always they manage to distribute quickly enough to maintain that level (Kjörling, P., personal communication. 2007-07-13).

Quality level is also crucial for KD. Firstly because poor quality levels cost a lot of money, the company gets paid to do something once, and if it does not get done right the first time
it will have to be done over again and it costs more money. Plus that a lot of the goods KD handle are quite expensive, which means further costs (Kjörling, P., personal communication. 2007-07-13).

In the areas where KD manage inventory the inventory availability is quite important, that is because it is linked to service level. Inventory turnover rate is also seen as very important. It is important partly because of the classical issue that keeping inventory ties up capital. However this is not the largest cost when looking at the company’s result, the cost of borrowing money for this purpose is not very significant in that context. The main reason why KD wants to have a high inventory turnover rate is because low turnover rates require larger facilities, and facilities are expensive. Low turnover also increase the need for more equipment such as trucks etc. and it also requires more personnel, since e.g. picking rounds and goods arrival rounds get extended. Low turnover drives the amount of working hours up and the efficiency down. To sum up, a high inventory turnover rate is important to maintain low facility costs and personnel costs, but not so much to lower capital costs in KD’s case (Kjörling, P., personal communication. 2007-07-13).

At the operational level KD mainly measure rows per hour for picking in the warehouse since this is considered an important measure of efficiency (Kjörling, P., personal communication. 2007-07-13).

### 4.4.5 Financial measures

When it comes to financial measures EBIT (Earnings before Interest and Tax) is crucial, but EBIT has to be put in relation to something, and that is why KD also looks at the ROCE. A profit of, lets say 10 million, has to be put in relation to how much money that has been used to generate that profit. Rather than solely trying to increase income through increasing sales and cutting costs attention also has to be put on increasing inventory turnover rate. This non-financial measure is linked to the ROCE in they way that when it is increased it creates a double effect in the ROCE division (Kjörling, P., personal communication. 2007-07-13).

\[
ROCE = \frac{EBIT}{(Total\ Assets - Current\ Liabilities)}
\]

When inventory turnover is increased it results in decreased total assets, thus decreasing the capital employed. Further, increased inventory turnover also decreases costs in terms of personnel, facilities, interest etc. which in turn increases earnings. This way the ROCE will be higher without the company selling more (Kjörling, P., personal communication. 2007-07-13).

### 4.4.6 Current goals and strategies

KD has a strategic plan which is updated once every year, and there is a so called attenda-circle. The strategic plan is then broken down and together with the input from a number of surveys the plan of action is formed for the coming year. Within the plan of action the budget is done and measurement goals are updated after taking changes into consideration. A strategic plan is rarely radically changed at KD, it is merely adjusted considering what has happened during the past year or if the environment the company exists in has changed. KD does not change which measures to measure, but they change the target levels of the goals they measure (Kjörling, P., personal communication. 2007-07-13).
When defining and setting goals KD works according to the principles of SMART. They start out by posing the following questions (KD *Hur mäter vi?*, 2005):

7) What is the task?
8) What do we want to happen?
9) What is the desired result?
10) How do we define success?
11) What does the ideal situation look like when the goal has been reached?

When these questions have been answered the process of Measuring – Analysis – Activity is initiated. This process is influenced by available resources such as employee competence, time and cost etc. Resources are looked over and at this stage decisions are taken on whether new resources have to be acquired to reach the goal and if these resources can be attained at a reasonable cost etc. If resources prove to be insufficient KD first look at the methods of reaching the goal, and if there are different methods which can be used that are quicker or less costly. If not, the goal has to be adjusted to fit the available resources, however, this option should always be a last resort (KD *Hur mäter vi?*, 2005).

For a goal to be defined as SMART it has to live up to the following criteria (KD *Hur mäter vi?*, 2005):

6. **Specific** – clear what is measured and the purpose of measuring it.
7. **Measurable** – quantifiable in numbers.
8. **Accepted** – employees understand the purpose.
9. **Realistic** – it has to be achievable, no fantasy numbers.
10. **Time specified** – ex. In 5 months time we shall have 98% level of something.

If a goal does not pass these criteria the goal can be describe by turning the abbreviation around, the goal then becomes TRAMS, hence no point measuring (Kjörling, P., personal communication. 2007-07-13).

### 4.4.7 Changes in performance measurements and goals

Before when KD worked with home distribution they used to look at complete orders from purchase to delivery when measuring their service level, instead of breaking it down to row- and package-level. They did that because they delivered to the end-consumer of the product. Now when KD delivers to pharmacies, hospitals and clinics they all store the goods before the consumption by their patients and customers. When distributing to private people one has to have in mind that they are not used to receiving deliveries and do not which for frequent deliveries, people calling about delivery updates and delivery status etc. and that is why it was important then to look at the entire order (Kjörling, P., personal communication. 2007-07-13).

About 10 years ago, measures started being gathered more along the processes at KD, hence making the organization more process oriented. Generally measures are not often changed, but from time to time focus shift from some measures to others and that is based on how well they show. Values might drop and efforts have to be put into doing something about
it, and that is also when measures begin being broken down to analyze the situation (Kjör-ling, P., personal communication. 2007-07-13).
5 Analysis

In this chapter connection of the empirical findings with the theoretical background will be made. The chapter is divided into different clusters of empirical findings and thereafter connections with the theory will be made.

5.1 Hemglass AB

5.1.1 Strategy and measurements

From when Hemglass was founded and up until the 90s the company did not have many problems reaching a wide range of costumers. Because of the “ice cream war” in the middle of the 90s and a change in costumer behaviour it became more difficult to keep the company profitable. The situation has largely been like this until recently as measuring within the company has become more important (Södergren, B., Personal communication. 200-07-05). The increasing importance of measuring could be connected with Hemglass’ goal of becoming more profitable. This can be as Simons (2000) tells us about the use of measurement in making goals and objectives actionable. To measure the performance in the processes – performance measurements – and thereafter define, calibrate and communicate business goals while supporting them through performance measurements is an important managerial task (Simons 2000). It is also important to understand that profitability is important but that to reach this Hemglass also need to achieve non financial goals as quality and costumer satisfaction, as Niven (2005) argues are the financial perspective of measuring in companies lagging and only historical. This give the picture about the actions that was preformed but non financial measurement are leading measures and these contain indications on performance before the actual process have started or is in progress (Simons 2000).

As mentioned before the impact of performance measurement on strategy seemed to be most significant for large companies and companies operating in rapidly changing environments. That is, performance measurement is more beneficial for such companies in general (Tapinos et al. 2005). Before the “ice cream war” in the middle of the 90s, measuring was not focused upon in the organization (Södergren, B., Personal communication. 200-07-05). This could be because, as Tapinos tells us, about that companies operating in slowly changing environments have low benefits of measurements. When the company does well and is stable the need is not apparent, and such was the case for Hemglass. The “ice cream war” created a need for Hemglass to better control costs and thereby increasing the profits which had gone down.

5.1.2 Priorities in performance measurement

The daily results are essential to maintain profitability and customer relations, as bad results might indicate that the customers have not gotten into a good relationship with the company. The company deals with the end customer directly and the impression and the relation that the customer has with the company decides the future of the company according to the Jönköping branch manager at Hemglass. Non-financial measurement and long-term thinking as for an example; having a good relation with the costumers, is important for companies. Focusing on the customer by measuring number of places visited, number of customer visits, amount of customers as Hemglass do is therefore an important way of balancing how they look at the results (Södergren, B., Personal communication. 200-07-05).
Turnover and the daily sales per unit are both very important in the long term and short term for Hemglass. However, one thing to keep in mind is that this must not be allowed to influence customer care, as that will damage long term relations and profitability in the long run (Södergren, B., Personal communication. 200-07-05). Petri and Olve (2003) also believe that financial measurements do not give the full picture of how a company performs and the reasons of achieving good financial numbers can be as simple as favourable business cycle as could have been the case for Hemglass.

Three basic demands need to be fulfilled by a performance measurement system in order for it to be effective (Kerssen-van Drongelen & Fisscher, 2003). (1) The performance measurement systems functions have to fit with the organizational structure and context at a certain time. This is particularly true in Hemglass, as their performance measurement system is a direct result of reacting to their changing business environment. (2) The formats (metrics, norms, methods etc) have to be appropriate for the measurement function. This is more difficult to check for an outsider, but the company claims that their measuring is working and should thereby fulfill this requirement. (3) Most importantly, the actors involved in performance measurement, have to function ethically. A potential risk exists in the mystery shoppers. Their judgement must be correct and fair at all times, and that isn’t easily achieved (Kerssen-van Drongelen & Fisscher, 2003).

### 5.1.3 Balanced scorecard

In Hemglass the performance measurement is not based on the balanced scorecard or any balanced measuring method. The importance of a balanced measurement is nevertheless mentioned, and Hemglass is working with a broad variety of measurement, both financial and non financial (Södergren, B., Personal communication. 200-07-05). This can be compared to as a strict hierarchical model of measurement system that is characterized by cost and non-cost performances on different levels of aggregation (local office- national office – the owner Nésle), ultimately becoming financial/economic measurements (Toni & Tonchia 2001).

Tapinos et al. (2005) uphold that performance measurements are an important part of the implementation of strategies and this seems to be the way Hemglass is using their measuring. Still, Halachmi et al. (2003) argues that the opposite might be true; the measuring activities will sometimes be costly and inefficient, and not have the effect intended. At Hemglass, the measurements are a direct result of increasing competition, and are easily motivated by its supposedly long term effects (Södergren, B., Personal communication. 200-07-05).

### 5.2 Kronans Droghandel AB

#### 5.2.1 Strategy and Measurements

Strategy work and performance measurement is deliberate at KD in the sense that the company management is well aware of how their strategic goals are linked to their performance measurement (Kjörling, P., personal communication. 2007-07-13). According to our findings performance measurement on different aspects is done throughout the organization and those measurement results are used to aid decision making and managerial control (Kjörling, P., personal communication. 2007-07-13). A simple example of how performance measurements play a role in the strategic work mentioned in the results section was when updating the strategic plan each year KD use input from e.g. non-financial perform-
ance measures such as customer satisfaction when setting performance goals and developing
the plan of action for the future. Connecting performance measuring to strategy is neces-
sary to benefit the most from the effort (Tapinos et al. 2005).

At KD the strategic plan is rarely radically changed, since a strategy should be based on
long-term thinking (Kjörling, P., personal communication. 2007-07-13). As Simmons
(2000) describes, goals may represent the general aspirations of the organization and objec-
tives and targets are more specific consisting of measurement values and time frame. The
strategic goals, i.e. the general aspirations, do not usually change at KD, it is rather the ob-
jectives and targets that are changed or adjusted after different input has been considered.

It is clear at KD which measures they want to measure any why they want to focus on them
and they achieve this clarity through working according to the principles of SMART goal
setting (Kjörling, P., personal communication. 2007-07-13). They start out by posing five
different questions about a given task, the nature of the task, what they want to happen,
expected outcome etc. and in this way reaching the conclusion on what needs to be meas-
ured in order to ensure a successful accomplishment of the task (KD Hur mäter vi?, 2007).
It is a backwards process, starting with the goal and then breaking down the path from the
goal until the start is reached in terms of what to measure and manage. Having a frame-
work in measuring efforts will reduce the risks of non ethical behavior and thereby increas-
ing efficiency (Kerssen-van Drongelen & Fisher, 2003).

5.2.2 Priorities in performance measurement

Simmons (2000) describes performance measurement in the past as suffering from a num-
ber of defects such as building on too limited scope of information, too general and aggre-
gated information or that information was received too late. According to our findings
these issues seem to be clearly understood at KD and actions are taken to overcome them.
One example of how they deal with the problem of too aggregated information is when
ROCE is mentioned and how ROCE can be broken down into non-financial measures and
what effect a change in these have on the ROCE. This is also an example on how the rela-
tionship between a non-financial and a financial measure is clearly understood and the ef-
fect they have on each other. Another example of how they deal with the issue of receiving
information too late is the stop light chart and how it can give early indications on stock
availability (Kjörling, P., personal communication. 2007-07-13).

When it comes to priorities in performance measurement financial measures are the most
important in the sense that the company naturally wants to make a profit, no matter
whether it is in the short-term or long-term, the goal is to be profitable, since a company
exists for the sole purpose of creating value for its owners (Kjörling, P., personal communica-
tion. 2007-07-13). The question is how to become profitable, and according to our find-
ings KD seem to find many answers by focusing on non-financial performance measures
and how they are linked to the financial performance measures and their outcomes. Chap-
man (2005) argues that focusing on financial measures usually result in short sighted prob-
lem solutions, and perhaps that is also related to the fact that financial indicators are lag-
ging, hence creating a greater sense of urgency to fix the problem fast. However, this does
not seem to be a very big issue at KD, judging from our results they are well aware of and
focused on several other non-financial performance measurements (see Fig. 2) and also how
they are related to the financial measures.

As mentioned earlier the priority of which measures that are measured at KD are not often
changed, but from time to time focus shift from some measures to others based on how
well they show. If values drop efforts will have to be put into solving the problem, this is also when the measures are broken down and analyzed (Kjörling, P., personal communication. 2007-07-13). This could however mean that measures do change, at least slightly, in the sense that if a measure is broken down into its components and the components start being measured it could mean that a different perspective of the organization starts being measured. Even though this new measure might be related to the problem it can be of a different nature.

The three basic demands for successful performance measurement described by Kerssen-van Drongelen & Fisscher (2003) can be applied to KD as well. (1) The performance measurement systems functions have to fit with the organizational structure and context at a certain time. According to our findings KD has experience in performance measurement and they have used the compass for 20 years, only minor adjustments have been made. If the context would change radically, this requirement might not be true anymore. (2) The formats (metrics, norms, methods etc) have to be appropriate for the measurement function. The compass has been used for a long time, and the closely related balanced scorecard has been the subject for much research. Still, both tools allow flexibility, and the ultimate responsibility for fulfilling this condition will be put on the company. (3) Most importantly, the actors involved in performance measurement, have to function ethically. According to our findings the compass of KD has defined and described criterion for each measure. Every new measure developed is developed through a backward validation process. This ensures that the measures are difficult to abuse, although the risk always exists.

5.2.3 Balanced scorecard

When Kaplan & Norton (1996) explain the benefits of BSC they mention how it does not only focus on financial outcomes, but also on the human issues which generate those outcomes in order to ensure better performance in the long-term. Based on our findings it can be said that KD handles performance measurement in similarity to the principles of Balanced Scorecard. By looking at the organization from the four different perspectives of the BSC it will help managers to focus on the key performance measurements that generate success (Kaplan & Norton, 1996). At KD they have identified what they believe to be their key performance measurements within each of the four perspectives and our findings also indicate that they focus on how they are linked and how they affect each other.

Long term strategic effects can be created by using performance measurements (Tapinos et al. 2005) and KD has used performance measurement for some time in relation to efficiency and strategy. Complicated and extensive performance measuring can be resource demanding and have other effects than those expected because of that (Halachmi et al. 2003). As in the Hemglass case, the measurements seem justified according to our findings, and having a framework will decrease the complexity of measuring.

5.3 Kronans Droghandel and Hemglass AB comparison

KD and Hemglass differ in some ways when it comes to measuring non-financial variables. KD has their focus on measures which have more easily identifiable connections with their financial outcomes, such as picking speed in their warehouse and inventory turnover. How the non-financial measures they focus on are related to the financial measures they focus on is outspoken and understood at the company (Kjörling, P., personal communication. 2007-07-13).
Hemglass AB on the other hand puts emphasis on measuring for example behavior among sellers in the field and customer relations which seems more difficult to identify the financial relations of. As mentioned earlier, a customer can have excellent relations and perceptions of a company but still choose to purchase a product from a competitor. This might make it harder for Hemglass to definitely conclude which effects fluctuations in their non-financial measures have on their financial measures.

As Simmons (2000) states, that a company can not measure every little detail of their operations, but have to make a choice about where they will spend the time. According to our findings both companies mention that they have identified what they believe to be their respective key performance indicators which they believe to be critical to their success. Even though both companies are logistics oriented, the environments they operate in are completely different. KD delivers their goods to corporate customers while Hemglass sells their products to private customers and this of course has a huge impact which performance measurement they focus on. Not that e.g. customer satisfaction is less important to one or the other of the companies, but their customers expect different things. Their customers are satisfied in different ways.

KD has chosen to adopt a model, the so called compass and they also work according to the principles of SMART (Kjörling, P., personal communication. 2007-07-13). Hemglass have developed their measurements from what they see as their apparent needs (Södergren, B. Personal communication. 2007-07-05). Both are of course valid approaches, but using an existing model provides a starting point and framework to base procedures on. Hemglass’ mystery shoppers have an edge in that the time lag of measurements gets small. The financial perspective of measuring in companies can all be described as lagging or historical measurements, while non-financial measurement varies (Niven 2005). The problem of measures being historical in nature, and thereby the results of actions rather than reasons for actions is one of the main concerns in performance measuring (Gomes et al. 2005).

Both KD and Hemglass regard non-financial measures as important in their operations. For instance, KD has hands on methods of indicating the level of stock availability and concrete example of how their stock turnover rate directly impacts their profits. Hemglass tries a similar connection between the competence of their sellers and sales volume. Neglecting the importance of non-financial measures was one of the reasons leading to US companies becoming less competitive than what would be expected (Halachmi, 2005).
6 Conclusion

KD’s use of the Compass means that they measure non-financial variables. Their measures are also closely connected to strategy, as their strategies are typically based on trying to achieve target levels in their performance measures. This methodology is unique among the investigated companies since the other companies do not deliberately and obviously connect their performance measurement to their strategy.

The impact of performance measurement on strategy seems to be largest for large companies and companies operating in rapidly changing environments (Tapinos et al. 2005). For Hemglass, the environment has not really changed much; they still sell to the same type of customers. The company has gone from being very small to a large multinational company in some years and rather it is the competition which has changed.

Some researchers argue that small companies can in fact benefit from models involving soft, non-financial measures, such as the balanced scorecard (Gumbus, A. & Lussier, R.N., 2006). Still, in accordance to what is claimed by Burns & Waterhouse, among the companies we studied size seemed to be related to the extent which they were involved in performance measurement, and particularly more “sophisticated” performance measurement including non-financial measures. As example of sophisticated measures, Hemglass has special mystery shoppers that measure the sellers in their daily work and Kronans Droghandel has a large focus on keeping the quality and service levels up.

Out of the two companies participating in the main study, only Kronans Droghandel can be regarded as “experienced” in performance measurement. Hemglass was so profitable during many years that they did not care to develop performance measurement routines and tools. Kronans Droghandel, on their part, seem to have found a working performance measurement tool in the so called compass, as they started using it in 1987 and haven’t made any large changes since. Because the “Compass” resembles the balanced scorecard, and the balanced scorecard promotes long term goals (Kaplan & Norton, 1996; Arveson, 1998; Gumbus, A. & Lussier, R.N., 2006), the conclusion that Kronans Droghandel’s work deliberately with performance measurements based on long-term thinking in connection to their strategy can be drawn.

It seems hard for both companies to rank measures as more or less important, as all groups of measures are needed at the strategic top level in the organizations. They mention several different measures which they believe to be crucial to their success, but they do not rank them, apart from the obvious importance of profit.

Both companies use their performance measurements in context of their comprehensive strategies. Tapinos et al. (2005) have performance measurements as one of four important parts in the implementation of strategies. Halachmi et al. (2003), on the other hand, write that performance measurements can sometimes be counter productive, as it might be a very complex task. As both investigated companies use measurements in context of strategy, that seems to be a wise choice in order to achieve beneficial performance measurement.

The major expected benefits and reasons for using both financial and non-financial measures materialize when the relationships between the two are understood. These relationships can be hard to establish, some links are more obvious than others, but if this can be managed the performance measurement efforts will be more fruitful (Kaplan & Norton, 1996).
To conclude, no simple, one-size-fits-all solution seems to exist when measuring performance. Every organization has to find their own balance, suitable for their specific situation. When doing this, tools and methods such as the balanced scorecard can be used as guidelines and backbones in the solutions.
7 Discussion

If Hemglass would use their strategy as a starting point when deciding on what should be measured, it would probably have a positive effect for the company. Their goal is to make their customers delighted and happy when arriving at a location. This aspect could perhaps be better measured by increasing, for instance, the questionnaires. Measuring how the customers feel about the service and the behaviour from the salesmen is maybe not as prioritized today as it should be. Although, one should remember that asking customers what they want is not always the best way of finding that out, because customers do not always know what they want until it is offered to them. Another problematic factor regarding customer questionnaires is that customers may not always answer truthfully. This may be due to lack of interest, or also because of the previous factor just mentioned. It could also be interesting measuring aspects in connection to arriving, like at what time the arrival is taking place and how late they are. Choose measurements with high strategic importance.

To connect again to what has been mentioned earlier; a private company has to create value for its owners and that is why the financial measures are always crucial at the end of the day, the organization has to be profitable. But the question is how to get there, how to make sure the organization becomes or stays profitable and it is in this context that the non-financial measures are the key. While financial measurements show the result of the actions of the company, non financial measurements are long term and focus on the sustainability of the company. When the financial measures are broken down into non-financial components as described earlier, it is this connection which is interesting to analyze and can be suggestions for further research. The financial performance will always have to be measured because neglecting to do so would be like driving a car blindfolded. But, at least for a logistics company, financial performance is based on non-financial operations, so those are the ones that need to be measured and managed to achieve a positive financial outcome.

Some measures can be quantified both in financial and non-financial terms. Take the measure Inventory Turnover at KD as an example; this measure can be quantified in the number of times the inventory is turned over, the number of goods turned over during a period of time, or the value of goods turned over during a period of time. In our study we used inventory turnover and the affect it had on the ROCE at KD as an example of how a non-financial measure is connected to a financial outcome. In this case it does not seem to matter whether inventory turnover is classified as non-financial or not since it is still connected to the ROCE in the same way, and at the end of the day most of an organizations operations have to be translated into financial terms since making money is what the organization wants.

In the light of this it can be discussed whether it matters if a measure is classified as financial or non-financial, and if all non-financial measures can be translated accurately into monetary terms. In the case of Hemglass inventory turnover is related to maintaining a good ice cream quality; and Quality Level is another example of a measure that can be measured in both financial an non-financial terms. The quality level is intuitively linked to customer satisfaction, but customer satisfaction is a measure which is not as easily translated into financial terms as the previous two. Not to mention employee education, which seem very difficult to link to specific financial outcomes.

Based on the discussion above it seems like the question is not whether a measure is classified as financial of non-financial but instead at which point in the process or the organization it is collected or compiled for measuring the performance. Kaplan & Norton (1996)
and Gomez et al. (2005) claim that financial measures are lagging indicators of performance, but considering the discussion above it leads to believe that this does not always have to be true. It could be so, that the classification “financial & non-financial” is not as important as the links between different measures and how they affect each other. However, the essence of the balanced scorecard is to distribute attention away from only focusing on financial measures and shifting focus onto other important aspects to measure within the organization. And it shall also be said that establishing the exact connections between ALL measures measured in the organization must be a quite time consuming and complicated process.

To finish off; There are many ways of measuring and balancing measures, but as Halachmi (2005) puts it, when considering all requirements of conducting performance measurement it might be impossible to get good results all together. As he continues, the potential benefits of measuring performance have to be put in relation to the costs of implementing a performance measurement system. This is a somewhat conflicting view from that of Kaplan & Norton (1996); Kaplan & Norton (2001) and Niven (2005) which are promoters of the Balance Scorecard who argues that a balanced measure of performance as the Balance Scorecard is preferred even if it requires a lot of energy and resources. This can lead to believe that each company needs to find their own balance regarding this.

7.1 Suggestions for further study

One of the weaknesses of this study is the limited scope of the empirical findings. The quality of the information gathered at the two companies participating in the main study has been satisfactory, but more companies can be studied to perhaps open up for opportunities to generalize regarding the conclusions. This is a suggestion for further study.

Another aspect which could be studied more in detail is how performance measurement is done on different levels in the organizations, for example make a similar study at Hemglass on a national level or even at Nestlé on a global level.

Performance measurement methods such as the Balance Scorecard are resource demanding for the company in terms of cost and human resources and the extent to which companies are involved in performance measurement seem to be related to size according to research within performance measurements presented in the theoretical framework. The fact is nevertheless that it seems easier, on the face of it, to measure a process in a small company where the organization is not that big and complex. Should it not be less resource demanding when the amount of measuring data is less and the process is easy to overview? There is still a need to explore the potential benefits for smaller companies regarding performance measurements further, how and if they can benefit from using a balanced scorecard model. Developing performance measurement methods designed specifically for SME companies could therefore be suggested for further study.
8 References


**People**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Björn Södergren</td>
<td>Branch manager</td>
<td>2007-07</td>
</tr>
<tr>
<td>Per Kjörling</td>
<td>Head of healthcare logistics</td>
<td>2007-07</td>
</tr>
</tbody>
</table>
9 Appendix
Appendix 1  - Questions for Small and medium sized companies
Appendix 2  - Questions for detailed interviews
Appendix 1 - Questions for Small and medium sized companies

Interview questionnaire

1. Hur arbetar Ni med prestationsmätning?
2. Vilka verktyg och vilket tillvägagångssätt tillämpar Ni vid prestationsmätning?
3. Vilka anser Ni är era 5 viktigaste mätetal för Er prestationsmätning?
4. Vad har Ni för förhållande till finansiella och icke-finansiella mätetal? Var ligger fokus?
5. Hur är Era strategier kopplade till mätetalen?
6. Känner Ni till och använder Ni balanced scorecard?
7. Om ja, vad anser Ni om det verktyget? Fördelar?
8. Om nej, varför använder Ni det inte? Nackdelar?
Appendix 2  - Questions for detailed interviews
1. Hur arbetar Ni med prestationmätning?
   - Beskriv hur ni mäter er prestation?
   - Hur mäts prestation på olika nivåer i företaget?
   - Beskriv skillnader och likheter på olika nivåer?
   - Utgör dessa nivåer en hierarki av prestationsmått?
   T.ex. att man adderar ihop mått på en nivå till färre mått på en högre nivå.

2. Vilka anser Ni är era viktigaste mätetal för Er prestationmätning?
   - Vilka är de viktigaste finansiella mätetalen?
   - Vilka är de viktigaste icke finansiella mätetalen?
   - Varför är dessa tal viktigare än andra?

3. Vilka verktyg och vilket tillvägagångssätt tillämpar Ni vid prestationmätning?
   - Hur samlar ni in data/mätetal, hur går ni tillväga?

   - Vilka av följande grupperingar av mätetal använder ni er av: finansiella, interna processer, kunder, kompetensutveckling, tillväxt? Är dessa separerade eller vägs de samman?
   - Vad skulle det innebära att ha en annan balans?

5. Hur ser era mål ut, och hur ser er strategi ut för att nå dessa mål?
   - Beskriv hur ni arbetar med mål och strategier?
   - Beskriv sambandet mellan mål och mått?
   - På vilket sätt påverkar de mätetal som ni anser viktiga er strategi?

6. Hur har ert sätt att arbeta med mål och prestationmätning ändrats på de senaste fem åren? De senaste tio åren?

7. Vem är ansvarig för att samla ihop resultaten, och vem använder dem sedan? I vilket syfte används de?

8. Vilka är era erfarenheter av arbetet med mål och prestationmätning?

9. Känner Ni till och använder Ni balanced scorecard?
10. Om ja, vad anser Ni om det verktyget? Fördelar?
11. Om nej, varför använder Ni det inte? Nackdelar?